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ABSTRACT

Focusing on vocational education as a facilitator of rural economic development, the author of this paper discusses how to develop a rural community that will attract new jobs. His discussion includes the following key points: the role of local development corporations; concerns about quality of living for employees; encouragement of home-grown industries to expand; and the importance of agriculture. Implications for research are summarized. Finally, the author presents a case study based on the experiences of the rural community of Staples, Minnesota. (BM)

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Occasional Paper No. 62

THE ROLE OF VOCATIONAL EDUCATION IN THE ECONOMIC DEVELOPMENT OF RURAL AREAS:

IMPLICATIONS FOR RESEARCH AND DEVELOPMENT

by

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PREFACE

In this era of bad news—of political unrest, economic recession, and bleak employment prospects for a number of people—it is especially heartening to discover a genuine success story. The story of the rejuvenation of Staples, Minnesota, is just such a success story. Fifteen years ago, Staples was a dying town. Today it offers a wide variety of employment opportunities and community services for a growing number of residents. One of the key elements in the economic recovery of Staples was a strong vocational education program. One of the community leaders responsible for this recovery is Duane Lund, superintendent of the Staples, Minnesota, Public Schools.

Dr. Lund was born in Brainerd, Minnesota, and received all of his formal education in that state. He holds a B.A. from Macalester College in St. Paul and both M.A. and Ph.D. from the University of Minnesota. He is also a certified psychologist. Dr. Lund has held a number of professional positions in teaching, counseling, and government service. From 1955-58, he served as executive secretary to U.S. Senator Edward J. Thye. He became assistant director of the Guidance Institute at the University of Minnesota in 1959 after which he became a high school principal and then superintendent of schools in Staples. He has held the position of superintendent of the Staples, Minnesota, public schools since 1960.

In addition, Dr. Lund has served on numerous governmental committees and commissions, both on the state and federal levels. The list is extensive and includes the White House Conference on the Education of the Disadvantaged Child, the National Advisory Council on Vocational Education, and the Committee for the Study of a Decade of Vocational Education Research and Development. He has been called on a number of times to assist in various job creation efforts throughout Minnesota and in other parts of the country.

On behalf of the National Center for Research in Vocational Education and The Ohio State University, I take great pleasure in presenting Dr. Lund's speech entitled, "The Role of Vocational Education in Economic Development of Rural Areas: Implications for Research and Development."

Robert E. Taylor
Executive Director
The National Center for Research
in Vocational Education

THE ROLE OF VOCATIONAL EDUCATION IN THE ECONOMIC DEVELOPMENT OF RURAL AREAS: IMPLICATIONS FOR RESEARCH AND DEVELOPMENT

Introduction

Rebuilding rural America is important to the welfare of all our people. We are an interdependent society. In the long run, one segment of our population seldom profits because of the losses of another. When our cities were burning in the 1960s, all of us paid a price. When the great drought of the 1930s devastated the agricultural Midwest, it contributed to the most serious depression our nation has ever known. When we educate our youth but do not give them the skills with which to make a living, we all pay the crime and welfare bills. But when all our people are doing well, we contribute to each other's prosperity and quality of living.

Rural America has long made a disproportionate contribution to the leadership and general well-being of our country. Which of our recent presidents was "born and raised" in one of our larger cities? Gerald Ford was born in Omaha, Nebraska, but before him we have to go back to William Howard Taft, who began his life in Cincinnati, Ohio. In 1979, 82 percent of the presidents of *Fortune* magazine's top fifty corporations grew up on farms or in cities of less than 50,000 population. It is likely that similarly impressive statistics can be generated in regard to the big names of entertainment, medicine, education, engineering, law, the military, and other professions.

This is not to minimize the contributions of our great cities. After all, it is in these larger population centers where most of our nation's leaders received their college or university education, and it was here that most of them rose to the top of their business or professional field. Again we need each other.

Following World War II, we saw mass migrations from the small towns and farms to the big cities. There was an industrial explosion—in nearly all the megalopolises of this country—as big business and big industry expanded to meet unprecedented consumer demands. The best jobs and the best wages were there. Meanwhile, improved agricultural technology made it possible for the farmer to operate a much larger acreage, and the more successful, soon bought out their neighbors. In most cases, these displaced persons looked to the urban centers for employment. Young people left for the larger cities as soon as they finished school; the average age of the rural population grew older in contrast to the national trend. The general effect on rural America was depressive, and with declining populations came a declining economy.

Meanwhile, many of the transplants did not find the success or happiness they sought. Those without job skills were forced to work at minimum wages and to live in substandard housing. The more successful moved to the suburbs in the hope of duplicating the small-town atmosphere they had known, but somehow it wasn't the same. Instead of knowing many people well and enjoying a wide circle of friends, social life was often limited to one or two neighbors and a relative handful met through their place of employment. Church connections were often dropped, and this source

of spiritual and social support was also lost. Unhappiness led to further dissatisfaction within the family; and divorce, relatively rare on the farms and in small towns, became commonplace. Even the successful could barely wait for weekends to join the heavy streams of traffic heading back to the countryside or toward recreational opportunities outside the city.

Follow-up studies of our high school graduates (Staples, Minnesota) have revealed a desire on the part of many to return to the hometown or farm or to a similar rural area. We asked them if they would return if similar jobs were available at fifty cents less an hour. Over 70 percent replied, "yes."

They expressed the following reasons for wanting to return to rural life (in this order):

- A better place to raise children
- Lower living costs
- More freedom from crime and drugs
- Availability of outdoor recreation
- More living space
- Easier to make friends

However, there were some things many said they would miss about city life (in this order):

- Shopping opportunities
- Professional sports
- Access to commercial air travel
- Cultural opportunities

In 1977, the Minnesota Poll, sponsored by the *Minneapolis Tribune,* found that a majority of Minnesotans (over 60 percent) would prefer to live in a nonmetropolitan area.

In the 1960s, the world of business and industry began to take a serious look at the advantages of expanding to rural areas. Concentrations of population had magnified social and economic problems—problems of crime, minority discrimination, labor conflicts, city finances, unemployment, welfare, housing, absenteeism, and more. With considerable hesitation at first, like a boy testing the temperature in the mill pond with his toe, industry experimented with satellite plants in smaller cities. "The water felt good," and soon major employers were plunging into rural America. As industries moved into Staples and into our neighboring communities in central Minnesota, management was asked why they had come. Reasons were given in this order of preference:

- Supply of labor with adequate skills
- Harder working, more productive employees
- More dependable workers, less absenteeism
- Fewer problems with unions
- Better living conditions for employees
- Lower rent or building and land costs
- Fewer problems with local government

Twice in the last decade these same employers have asked why they have stayed or if they have had any misgivings. There was no significant change in the rank order of reasons given for preferring the rural area, nor were there serious disappointments. A few, however, did encounter attempts to organize unions, and sometimes these were successful. To some employers, the union was not objec-

tionable; to others, it was viewed as undesirable. When asked to list problems they experienced as a result of their move to smaller towns and cities, businesses and industries identified transportation of materials and manufactured goods and mail services as slower and/or more costly. It is not the intent of this paper to examine why some states are more successful than others in attracting out-of-state or foreign employers. Factors that have been identified include tax climate, labor legislation, and supply of skilled labor.

It has been our experience in central Minnesota that once an industry or business expands to a rural area, it is very likely to stay. It is important to note that most of the movement from city to rural has been by way of expansion, usually through the establishment of satellite operations. These, then, are new jobs; seldom does rural relocation mean fewer jobs in the larger cities. Workers who come from the centers of population are usually unemployed or underemployed. What the new jobs really mean is that the rural people—and young people in particular—will have the opportunity to continue to live in the countryside and will not add to the problems of the cities. This is important, because it would not help solve the problems facing our larger urban centers if rural jobs took away jobs and tax base. Ideally, we will strengthen the cities as we strengthen the rural areas. The smaller towns and cities usually can manage the problems growing out of economic development. There will, however, be problems—housing, extended water and sewer lines, expanded public services in general, and greater demands for power. On the other hand, with a national decline in the birth rate, movement to the rural areas has seldom necessitated school construction. Meanwhile, stable or slightly declining populations in the cities will help make many of their problems more manageable: school costs can be cut, public service budgets can be reduced, and the general reduction of population congestion will help alleviate many of the environmental and social problems. Since we are not proposing taking jobs or tax base away from the cities, their governments will not lose the fiscal capability of supporting services. Of course, many people want to live in urban centers, and they should have the opportunity to remain where they are happy. In fact, for them, big city living should become more rewarding as a stable or slightly reduced population eases some of the problems.

The approach sounds simplistic, and it is. But the cause of the crises in the cities is not complex; it is largely the result of the movement of unmanageable numbers of people into the centers of population. The problems can, therefore, be truly eased by making it economically feasible for significant numbers of people to stay in rural America and for the unemployed, underemployed, and disenchanted to move out of the cities and back to the countryside where they want to live anyway. Expressed another way,

- since significant numbers of people living in the urban centers of this country would prefer living in rural areas, and
- since most people now living in rural areas wish to remain there, and
- since many of the serious problems facing our big cities were caused by mass migrations in the 1960s and '70s and could be more successfully managed with a stable or slightly reduced population, and
- since many of this country's smaller cities and towns need more people to make possible sufficient consumer demands to justify full-service communities, and
- since industries and businesses are generally pleased with their experiences in rural America to date, then
- what action is required to move this country in that direction?

Here the answers are not so simple, and only committed leadership in the rural areas can make it happen. Sometimes, it is made easier by industries and businesses that initiate the move because they have determined it is to their advantage. "More profit" is the name of the game. However, a

community cannot just sit and wait for big-name corporations to drop in. A community must decide it wants to grow and be willing to commit considerable time and energy, and some resources, to that end. Other cities and towns are the competition, and many of them are aggressively contacting potential employers, letting them know they would be welcome and would have the full cooperation of that community. Even in the cases where an industry makes the initial contact, it is likely they are also in touch with several other communities. The response they receive will largely determine their final choice.

Once a town commits itself to growth, the first step is to develop a community profile that will match what most industries are searching for, and they are looking for much more than a warm smile and a friendly welcome, even though both are an extremely important beginning.

The Role of Vocational Education

Since it is the thesis of this presentation that vocational education is a facilitator of rural economic development, and since employers have listed "labor supply with adequate job entry skills" as the first priority in seeking expansion sites, it is logical to begin with "vocational education" in this discussion of how to develop a community that will attract new jobs. A city has a significant advantage in attracting new industry if it has a vocational-technical school, preferably a postsecondary institution, either in the form of an area school or a community college. The Utah Advisory Council for Vocational Education found in a 1976 survey that business and industry have a clear preference for vocational training at the post-high school level. Central Minnesota employers concurred in this finding. Nevertheless, a sound high school vocational program with multi-offerings is still far better than none at all. CETA training is also available and becomes even more significant to a community if institutionalized vocational education is not available. There are other spin-off benefits to the employer from a vocational school:

- Retraining and upgrading programs are available to the employees.
- Students are free to work in their off hours since little "homework" is required in vocational programs. Employers then have the opportunity to offer permanent jobs to the better performers.
- Faculty members are available as consultants.
- Emergency repairs or projects can sometimes be handled by the school.
- Training can usually be tailored to meet the specific needs of the local industry without limiting the quality of education for the student.
- Employer representatives can serve on local vocational advisory committees and give their input in upgrading the quality of the program.

State economic development agencies have long recognized the importance of sound vocational education programs in attracting business or industry, even from other parts of the country. In several states, employees of the vocational division of the department of education are assigned to work with the state economic development agency. In some cases, economic development specialists are assigned to each vocational center as a liaison with industry to arrange training for new workers and upgrading for others and to make certain the curriculum is relevant. In a few states new industries are assisted by free training, even at the plant site.

Local Development Corporations

Local, nonprofit development corporations are essential as the "go-between" for both industry and the community. Their role includes—

- making contact with prospective employers;
- working with state economic development agencies;
- developing industrial parks (for which federal and sometimes state funds are available);
- helping companies secure financing (local, SBA, HUD, FHA, etc.);
- helping the local government procure grants for water, sewer, and utility expansion;
- providing packets of information about the community to all interested parties;
- introducing management-level employees to the area and helping them relocate.

Quality of Living for Employees

Enlightened employers are concerned about quality of living for their workers. It becomes important, therefore, that these smaller cities become "full-service" communities.

Size, of course, is a factor. The city must be large enough to support the following services:

- Hospital and medical centers
- Good schools
- Water, sewer, and other utilities
- Adequate shopping and financial services
- Housing
- Recreational and cultural opportunities
- A choice of churches
- Reasonable access to public, long-distance transportation

Many villages are too small to offer full services, but they may be located near enough to a larger population center to make good "bedroom communities" and even attract smaller employers on their own. Size isn't the only criterion. Leadership is usually the key in developing a community that will be attractive from all these points of view.

Prospective new employers can sometimes be frightened away by what they see in a community. A history of labor conflicts, for example, can be very discouraging. Internal squabbling and factionalism in a town can also be a deterrent. Even the general appearance of a city is important; prospective industries and businesses receive negative signals from—

- run-down business buildings;
- poorly kept yards;
- dirty streets;
- unsatisfactory snow removal;
- lack of local pride;
- a negative, pessimistic spirit expressed by those who live there.

Home-Grown Industries Are Often Overlooked

It is tempting and easy to look too far on the horizon for new, big-name employers. With help and encouragement, local "home-grown" industries can often expand. The great majority of new jobs are generated through local industrial and business expansion rather than from new companies moving into town. However, just as new industries may be attracted by a school's vocational-technical offerings, new enterprises may be started by local residents who recognize that an exodus of vocational graduates with certain skills exists simply because their kind of employment is not available in that area.

Big Isn't Always Best

Too often community leadership thinks only in terms of bringing in satellite operations of one of the better-known corporations. A city is probably better off adding ten firms initially hiring ten workers each than a single company employing a hundred. If the one large company has financial or other difficulties that force it to close or leave, the impact on a small community can be devastating. It is also true that in the long run, the ten small companies will probably create more new jobs collectively than will the single, larger enterprise.

Agriculture

Because less than 4 percent of our nation's people are full-time farmers, it is easy to overlook the importance of agriculture. Actually, between 30 and 40 percent of all jobs in the United States are agriculture-related (depending on definition). Most small cities are far more dependent on this basic industry than they may suspect. Agriculture/agribusiness—

- creates a demand for consumer goods, thus boosting the local economy;
- employs large numbers of workers;
- makes available to industry a labor supply of part-time farmers.

Vocational-technical education serves agriculture/agribusiness well through the following programs and activities:

- A variety of training programs in production agriculture and agribusiness
- Adult education programs including accounting and on-the-farm consultation
- High school agriculture programs and FFA for the children of farm families
- Operation and maintenance of demonstration-research farms

Implications for Research

Several implications for research may be of interest to the vocational education research community.

1. Our surveys of central Minnesota employers were rather simple and subjective. A more sophisticated instrument could be developed, and a national sample should be questioned on such issues as the following:

- Is there a clear preference for postsecondary vocational-technical graduates over those with only a high school experience?
- What does the employer perceive to be the advantages in moving to or establishing a satellite operation in a rural area? What are the disadvantages?
- What are the benefits (as perceived by the employer) of locating near an institution that offers vocational-technical education? How closely do employers' perceptions match those of vocational school administrators and teachers?
- What does the employer considering expansion or relocation look for in a community? Which community characteristics may frighten away or discourage prospective employers? New employers could again be surveyed three, five, or ten years after their arrival.

2. Nearly every institution that offers vocational education regularly surveys its graduates. However, the following information is seldom solicited and should be addressed through a national study (perhaps of more than just vocational graduates, in which case the Gallop or Harris Polls would be more appropriate):
   - Is there a clear preference for living in rural areas over urban centers? Is there a difference by sex? By age group?
   - What do different ages of the population like or dislike about rural living and about city living?

3. Case studies could be made of rural communities of varying sizes that have been successful in generating new jobs, as well as those that have not. Special attention should be paid to the presence or absence of vocational-technical education as a factor in attracting and keeping industry and business. Exemplary state programs, such as those in Oklahoma and South Carolina, could also be studied. These can be used as transferable models for other communities and other states.

4. Research models could be developed to help communities generate the data important to prospective employers. Such data would include the following types of information:
   - Vocational and adult education opportunities
   - Labor supply—both skilled and unskilled—with a breakdown for each trade
   - Availability of student help
   - Going rates of pay
   - Housing
   - Land and buildings available and typical construction costs
   - Community services breakdown including utility and power rates
   - Zoning policies
   - Transportation services

There are many rural success stories across the length and breadth of our nation today, but a great deal more can and should be done. A case study, demonstrating how one relatively small Midwest community (Staples, Minnesota) pulled itself up by its own bootstraps is summarized in an addendum to this paper.

In conclusion, economic development in rural America is critically important to the future of our country. It will not "just happen." Leadership and commitment on the part of each rural community is essential. The single, most important, tangible ingredient in attracting new employers is vocational education.

THE STAPLES STORY

Fifteen years ago, Staples was literally a "one-horse town." The community had a single industry—the railroad. It was a division point where crews changed on the Northern Pacific Railroad (now Burlington Northern). Staples also had a car repair shop. The town was surrounded by a sick agricultural economy, and even the railroad admitted it was in trouble and projected a gloomy future.

In the 1960s, the community leadership faced up to the question "Are we satisfied living in a dying, depressed area, or are we going to commit ourselves to making Staples the kind of place where we can enjoy living and have the assurance that we are giving our families the very best?" A commitment was made and goals and objectives were established to work on the following areas:

1. Excellence of education, with a high priority on the development of vocational skills
2. Quality health services
3. Housing
4. Recreation opportunities, especially for children
5. Cultural opportunities
6. Helping our churches work together and grow
7. Care for the elderly
8. Jobs, bringing in new industries
9. Development of a more diversified and aggressive business community
10. Help for the farmer

A task force approach was used, with the city and the school as primary vehicles for executing the work plans as they developed. A local economic development agency was established as a liaison between prospective employers and the community.

Recognizing there was little likelihood that industry on its own would choose to locate 140 miles away from the nearest urban center of population, the leadership was convinced it was necessary to offer special incentives—

- first, to develop and make available a supply of skilled, dependable labor;
- second, to make Staples the kind of community where people would want to live.

It was known from follow-up surveys with Staples high school graduates—90 percent of whom had been forced, for economic reasons, to seek employment in big cities—that nearly three-fourths of them wanted to return home and would do so if they could find employment. A majority indicated a willingness to come back even for less money.

One of the most difficult tasks was to convince the Minnesota Board of Education that a small community could support and operate a postsecondary vocational institute. Located in central Minnesota about 140 miles northwest of the twin cities of St. Paul and Minneapolis, the Staples

schools serve a large geographic area, with a relatively sparce population of less than 10,000. The city itself has about 4,000. In 1960, there were only eight such schools in existence in Minnesota; today there are thirty-three. Staples became number nine.

With a vocational school in place, Staples was ready to recruit industry. Although we were in desperate economic straits, the community was fussy. It wanted the best, and it wanted diversification, which would give employment to the skilled and the unskilled, to adults and youth, and to both men and women. The two major selling points were a supply of skilled labor and enhanced quality of living.

Simultaneously, our other goals and priorities were attacked:

1. Bond issues were passed and new schools were constructed.
2. Programs were developed that gave Staples' schools state, and even national, recognition.
3. Not only did the postsecondary area vocational institute become a reality, but the school system also became a vocational center at the secondary level, serving smaller high schools in the area as well as Staples students.
4. Physicians and dentists were recruited; a clinic, a new united district hospital, and a nursing home were built.
5. A high-rise, low-rent apartment complex for the elderly became a reality.
6. The community's three parks were improved, and a fourth developed on a small nearby lake. This park included a beach, picnic facilities, and a campground area.
7. A bond issue was passed and a community recreation center was built, with an indoor pool and gymnasium.
8. An arts council was organized, and many cultural opportunities and events were brought into the community.
9. New churches were built and old ones were remodeled. A fantastic ecumenical spirit (and program) developed.
10. The business community "dressed up." A mini-mall was developed and new businesses recruited.
11. The vocational school bought and developed a 320-acre irrigation research and demonstration farm, with support from the University of Minnesota and the Minnesota State Department of Education. In 1970 there were six farmers irrigating in the Staples service area. In 1980, there are more than 300. The future of agriculture in the region is very bright.
12. Sixteen new industries came to town, including the following:
    - 3M (where machines are built for use in the company's assembly lines all over the world)
    - An optical lens grinding company
    - A railroad box car repair company
    - A steel fabrication plant
    - Ornamental iron construction facility
    - Several machine shops
    - A rubber products fabrication plant
    - A sportswear manufacturing plant
    - A plastic products company

- A photo production facility
- A machine tool rebuilding shop
- A farm products processing company
- An advertising and commercial art agency
- A publishing company

It is significant that vocational education was a factor in bringing nearly all of these new employers to the community. Today, Staples' industries benefit greatly from the vocational program in the following ways:

1. They can recruit "the cream of the crop" as their employees, because they are on the scene.
2. They use the school's extension program to upgrade their workers.
3. As members of vocational advisory committees, it is easy for local employers to have input into the curriculum and to make it more meaningful to their particular needs.
4. They may use school staff as consultants.
5. In an emergency, the AVTI can do repair work.
6. Students may be employed late afternoons and evenings, and the best are offered permanent employment.

As important as vocational education is, it is by no means the whole answer to providing jobs. As has been pointed out, there must also be quality of living to attract more industries. Also, small towns in particular must become full-service communities. The people must be willing to make sacrifices. Growth means "growing pains." Bond issues must be passed to build schools, a community center, hospitals and nursing home, water tower, waste disposal plant, and additional water and sewer services. All these things cost money and mean higher taxes. Yet, the rewards are significant in terms of higher property values, jobs, an improved economy, and real quality of living.

Staples has come a long way through its bootstrap operation. Today it offers a wide spectrum of employment opportunities and quality living to all who call it "home."

QUESTIONS AND ANSWERS

Question: Do you think the federal government is instrumental in successful efforts to develop rural areas?

Very honestly, I don't think there is a great deal the federal government can do. I think it is appropriate that vocational education is still a state and local responsibility in our country. The federal government does have obligations, and it has given us excellent leadership in past years, particularly in grants for development of industrial parks and utilities for the rural communities. The federal government *can* create incentives. But perhaps one of the most effective things it can do is identify success stories. I really believe that if successes can be pointed out, and if it can be shown that vocational education makes the difference in your state or in neighboring states, others are likely to follow suit on their own.

I attended a conference in Colorado a few weeks ago. I thought I was pretty much immune to getting excited about vocational education, but when I heard the stories of what Oklahoma and South Carolina had done to bring industry from other states and foreign countries into their regions through vocational education, I really got excited. That is the kind of thing we have to do more of to inspire people. No matter where you go, the leadership is there, the potential is there, but people are probably not going to be motivated to action unless they see it happening somewhere in a similar setting. You can't legislate that; you can't just give dollars to get that. But I think you can show how economic development works in specific communities, and that will make a difference. I don't think you have to have many federal dollars. The dollars alone are not going to make the difference anyway.

Nor do I think federal incentives for industry to develop in rural areas is necessary; in fact, it may have an adverse effect. Employers may resist even more if they conclude profits will be so small a federal subsidy is necessary.

Question: Can you translate any of these ideas from rural settings to urban settings?

Some items are transferable, but generally speaking, it is a whole different ball game in urban settings. There again, some urban communities can have a vision, too.

Question: You mentioned that most employees you have dealt with expressed a preference for workers with postsecondary versus secondary training. Can you give us any figures on the enrollment in your schools?

I can give you the numbers: 750 postsecondary; 285 secondary. This is not quite fair, however, because many of the secondary programs are agriculture, co-op programs, etc. A more specific example would be our machine shop program. We have forty high school students in our high school machine shop program. In contrast, we have about 160 in the post-high school machine shop program.

Question: To follow up on the previous question, what reasons do employers give for preferring postsecondary over secondary graduates?

First of all, let's use as an example the forty machine shop kids we have in the high school program. Of those forty who graduate this spring, chances are fourteen or fifteen of them will go out on jobs as machinists. Our two-year program in postsecondary will graduate approximately 100 students in the machine trades this spring. Of those 100, I would guess that 98 will go out as machinists. Of those 98, a very high percentage will still be in that general field five years from now. They may have different jobs, but most of them will still be in the allied field. Of the high school machine shop people, who have much less training, a much higher proportion of them are expected to drop out of that trade in five years. They want to try it, but at their age, they are not all sure they want to commit themselves to that particular trade area. They are younger, and they haven't had as much training. Also, unless they go back for more training, they may be handicapped where promotions are concerned.

Question: Is the demand high enough to support employment of all these students within the community, or do students migrate out of the area to find jobs?

Many still have to go outside. But, of course, most of our vocational postsecondary students come from outside our area, too. But even of those from our own local school district who go on to our vocational school, over half start out working someplace else. But this figure used to be over 90 percent.

Question: What success have you had in dealing with minority students both in terms of keeping them in school and placing them on the job?

We have had a great deal of success with our five Native American satellite schools. The idea came from one of the members of the National Advisory Council for Vocational Education who was the director of a Native American vocational school in Mandan, North Dakota. We heard so much about the success of his program that we decided to go out and see for ourselves. I must say, we were surprised and impressed by what we found. I had been to every Native American vocational program in this country, including programs in Alaska, and all I had seen was disaster, frustration, unhappiness, and dollars down the drain. We had tried it ourselves in our own school when Vice President Mondale was a senator. We talked with him about Native American education, and he said, "We're both interested—you provide the education, and I'll get the money for you." He got lots of money for us, and we made every effort to bring Native Americans into our vocational school. One year we had over thirty-nine enrolled in the school, but never more than nine in attendance at any one time. Very few, if any, ever finished the program. Some got jobs and were good students while they were there, but they didn't last long unless they were on or near where they lived on the reservation.

The difference between our program and the Mandan, North Dakota, program was that the administration of the North Dakota program was 100 percent Native American. They had 85 percent Native American instructors, and they were located near the reservations. They understood the Native Americans' problems. The program was working better than I've ever seen it work anyplace else—with little help at that time from the North Dakota Department of Education, by the way.

I went to our Minnesota Department of Education and talked about the success I had seen in North Dakota. They said they would provide us with the same aids for those students as they would for anybody else. Of course we could also go out and bring in additional federal money for Native

American projects. From that beginning, we started three satellite schools, and we are now operating two others in the state—one of them 250 miles away. We have an all-Native American administration, and nearly every teacher is Native American. The programs have relatively low absenteeism, they have high retention, and they have much better placement than I ever expected. It is working. I think it will work a lot better (now that we know it *will* work) if the state will create a new vocational school, with multi-campuses, totally under a Native American board and administration. We've been the tow plane; they are off the ground, and I look forward to the day now when they can fly by themselves. I think that is the answer, and it certainly has been exciting for us to be a part of that.

Question: Is the vocational training offered in these reservation schools the same as that offered *off* the reservation?

Along with the traditional vocational programs, we have developed some new projects in conjunction with industry. For example, we have students involved in the construction of homes and other buildings. Students working on these projects often receive job offers from the construction companies in the area. In the tourist industry, the vocational program is working with the cooperation of a private company in the operation of a new motel. This is a start. This is only our third year, so I am sure much more will happen in those areas. The tribes have some money now, and they are trying to create jobs with that money. In the area of heavy equipment, they now have their own people to drive their own road graders and bulldozers in their communities.

Question: Is there a role for entrepreneurship in the development of rural areas?

Yes, there certainly is. The University of Minnesota has given effective leadership in this area. A program has been developed for the owners of small businesses what most universities have been doing for farmers in terms of farm management. There is a nominal tuition, and there are aids available through our state program out in the small towns. It has worked very well, but the biggest problem is getting the right people into the program. I remember when I came back from my first Advisory Council meeting. I was so excited. I was sure this was the answer for the people in my community, so I went to certain businesspeople and really talked up the program. They all said, "That's a great idea: George needs that class. And Ted—he belongs in that class." But the people I was talking to needed the class themselves, and they never enrolled. Some people just can't see their own needs. Yet, the program is working.

Question: To what extent would economic growth occur in a community naturally, without outside help? To what extent is vocational education crucial to this development?

I think research needs to be done in this area. In our own case, as I indicated during my presentation, none of the sixteen new industries pulled up roots, came to Staples, and brought their workers with them. Neither did they leave their workers behind and start completely from scratch. Every instance was a growth situation, a satellite operation, and they created new jobs. These jobs could have been created in Minneapolis or St. Paul or Deluth or anywhere else, but they were created in Staples.

Now, who filled those jobs is the important question. In many cases they were our vocational graduates as they came out of school; the new companies started small and hired our graduates as they grew. In other cases, the new industries were instrumental in bringing our graduates back from the larger cities. Some of these people left jobs in their trade in Minneapolis and came back to Staples.

I can't give you percentages on that, but a sizable portion in our Staples machine shop trade industries did just that. Also, several of the new jobs were taken by people already living in our area who had minimal job entry skills, but they could be employed right away with a little in-plant training. The important thing is that the new jobs we created in our community were not stolen from somebody else; they didn't cause unemployment somewhere else. However, some people did leave jobs elsewhere to come back here to live and work, but the jobs they left were filled by other people.

Question: Does creation of new jobs in a community like yours generally result from initiatives by industry itself, or is growth chiefly the result of strong community leadership?

Well, certainly it is both. First, industry must recognize the need to expand. You can't convince 3M to expand—they have to recognize and express that need. The reason industries came to Staples instead of Smithville, for example, could be because of our aggressive courting of that industry, but I have found that our greatest selling point is having the vocational school already in place. That is the greatest thing we have going for us. Now certainly industry can go to other places that do not have vocational schools, but unless they are willing to invest heavily in in-plant training, the vocational school will likely save them a great deal of time and money in terms of investment in training.

Now, I know that Ohio is investing heavily in efforts to attract new industry. The leadership really makes a difference. People like Governor Rhodes and Meryl Shoemaker inspire people to take a look at what vocational education can do. In other states, such as South Carolina, an economic development agency pays for a person to work in each of the vocational schools and community colleges full-time as a liaison to be sure the curriculum is relevant and that the right courses are offered. In addition, when a prospective industry is investigating the community as a potential site in which to locate a plant, that person makes the local arrangements and acts as the go-between. This is one way that strong leadership can make a real difference.

Question: Has the emphasis on new industry helped or hurt the general agricultural effort?

Certainly, many of the new workers have come from agriculture, but often the new jobs have attracted farm women who had not previously been employed outside the home and some of the smaller farmers, who have gone to work in the industries on a part-time basis in order to keep their farms going. I don't think the new industrial growth has diminished the agricultural output significantly. Any loss in real numbers has been offset through increased productivity, general expansion, and improvements such as new irrigation projects. A few farm people have forsaken the farm and have gone to work full-time in industry, but I don't think agriculture has suffered signficantly from this, because others now operate that land. Your more successful farmers have not gone to work in town so the economic expansion has not had a great impact on farm people generally except to provide better health and recreational facilities in the community. But that represents a significant improvement in their lives. Up until this year, farming has been more profitable than it was for a long time, so these people can usually do better on the farm than they could by going to work in town anyway.

Question: Do you have any women in your machine shop program?

Finally, we have some women in the machine shop program, but not many, and very few in the heavy equipment part of the AVTI program. We had some breakthroughs in the heavy equipment area, but these women have nearly all dropped out of the program. We have had much more success in certain other areas, phototechnology, for example. This area was all-male to start with; now it is at least half female. To give you the reverse situation, food services started out almost exclusively female; now it is about equally male/female. Some of those areas are successful, but the area of heavy equipment has been really tough. Drafting programs are showing great progress. We have many more women in this area, but we finally have a woman drafting teacher. That is making a difference, too.

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